## FINAL DRAFT: July 30, 2018/REZ

# 15 Essential Readings on Effective, Evidence-based Inclusionary Practices in Higher Education

## **BIBLIOGRAPHY 2002-2018**

This compilation of readings presents a synthesis of effective and evidence-based inclusionary practices within higher education. These reports focus particular attention on recommendations to increase student persistence and faculty recruitment, retention efforts, and mentoring programs among historically underrepresented students and faculty and to create policies and practices that foster more welcoming, inclusive and equitable university campuses.

1. Allendoerfer, C. & Yellin, J. M. (2011). Investigating best practices in the research mentoring of underrepresented minority students in engineering: The impact of informal interactions. In 118th ASEE Annual Conference and Exposition, Vancouver, Canada.

 $\underline{https://peer.asee.org/investigating-best-practices-in-the-research-mentoring-of-underrepresented-minority-students-in-engineering-the-impact-of-informal-interactions}$ 

Mentoring underrepresented minority (URM) students in engineering and science research has long been acknowledged as an effective way to engage undergraduates in engineering majors, and is also an essential component of the doctoral degrees that represent the gateway to careers in engineering research. The study was guided by the following questions: 1) What can we identify as best practices in mentoring and supervising URM students as they conduct engineering research? 2) How is the effectiveness of these practices perceived by URM populations? 3) To what extent are these best practices in research mentoring congruent with commonly accepted guidelines for undergraduate and graduate students from majority groups? Data were collected through an online survey and follow-up telephone interviews of a nationwide sample of URM engineering undergraduate students, graduate students, and recent PhD recipients. The major theme that emerged was the important role of informal mentoring by research supervisors and what it looks like in retaining undergraduate students and their persistence in engineering. By "informal" mentoring we refer to interactions during a student's research experience that are not specifically related to the research project at hand, for example conversations about career or academic pathways, or support during struggles in a student's personal life. The authors conclude that incorporating more informal types of mentoring into the research mentor-mentee relationship is one effective way for faculty to facilitate the retention of URM undergraduate students in engineering.

2. Guenter-Schlesinger, S. & K. Ojikutu. 2009. Best Practices: Recruiting & Retaining Faculty and Staff of Color. Western Washington University.

http://www.wwu.edu/eoo/docs/best%20practices\_recruiting%20and%20retaining%20staff%2 0of%20color.pdf. Retrieved from Best Practices: Recruiting & Retaining Faculty and Staff of Color

This paper provides an excellent summary and overview of "best practices" and strategies from a spectrum of higher education institutions that have been effective in recruiting and retaining faculty and staff of color. The authors list both recruitment and retention strategies together, due to their intertwining nature. Some strategies serve both recruitment and retention efforts; others are clearly aimed at either recruitment or retention. Although strategies are not intended to be exhaustive, this "working document" can help guide a University's efforts to identify widely used, effective strategies. This report was used to adapt the practices for the university that would work best and allow maximum flexibility to best define how the university could successfully reach its goals. Further, these initiatives that are on-going at Western are being further examined for possible enhancements so as to make their on-going search processes more effective in the recruitment and retention of faculty and staff of color.

3. Maruyama, G., Moreno, J. F., Gudeman, R. H., & Marin, P. (2000). Does diversity make a difference? Three research studies on diversity in college classrooms. https://files.eric.ed.gov/fulltext/ED444409.pdf

This report consists of three studies investigating the attitudes of faculty and students in predominantly white institutions on the import and impact of diversity and inclusion of racial/ethnic content in course materials, classroom discussions, and institutional commitments. The report departs from the historical moment prior to 1960 when only a handful of "Americans of color "went to college to the institutional sea change post 1960 when institutions first reached out to students and faculty of color in the belief that they would be the primary beneficiaries of the traditional education schools offered. Several noteworthy conclusions are proffered: white students benefit from the inclusion of racial/ethnic discussions because it provides them varying perspectives that support the educational mission of mainly PWI institutions; departmental values regarding diversity are held less strongly than institutional values as a large number of faculty (30%) perceive that diversity encourages admission of unprepared students; and selective colleges in the debate of who has the "right" to be admitted have lost their historic commitment to create communities that support their academic and social academic mission. This report is a transparent, important read concerning the nature and depth of institutional and faculty commitments to the inclusion of historically underrepresented students and faculty. It illuminates some of the reasons for the low representation of URM groups at elite, PWI colleges and universities.

4. Hanover Research Academy Administration Practice. (2014). Faculty Mentoring Models and Effective Practices, Washington, DC.

This report synthesizes effective faculty mentorship models and presents successful approaches to their implementation and support. The report comprises two sections. The first section reviews several innovative mentoring models and best practices for mentorship programs. The second section profiles notable faculty mentoring programs at two postsecondary institutions and presents activities for mentoring relationships. Approaches to specific mentoring strategies by race, gender, ethnicity and class are notably absent.

5. Moreno, C., Jackson-Triche, M., Nash, G., Rice, C., & Suzuki, B. (2013). Independent investigative report on acts of bias and discrimination involving faculty at the University of California, Los Angeles.

### https://www.ucop.edu/moreno-report/external-review-team-report-10-15-13.pdf

This report emerged after a group of concerned UCLA faculty approached university leadership to address several recent and well-known incidents of racial and ethnic bias and/or discrimination. The Executive Vice Chancellor and Provost authorized the creation of the External Review Team to conduct a review that consisted of an analysis of existing university policies, interviews with university administrators and faculty members, town hall meeting and the solicitation of written testimonies from concerned faculty. The Review Team made three primary recommendations including: (1)the standardization of investigations of occurrences of "incidents of perceived bias, discrimination, and intolerance" along with the referral of such occurrences to a university disciplinary body; (2)the institutionalization of preventative education and training programs that also provide record-keeping and monitoring of instances of perceived bias, discrimination, and intolerance; (3)the formation of the position of Discrimination Officer, who will lead the creation of education and training programs, university investigations, fact-finding, record-keeping, among other responsibilities.

6. Sorkness, C. A., Pfund, C., Ofili, E. O., Okuyemi, K. S., Vishwanatha, J. K., Zavala, M. E. & Javier, D. (2017). A new approach to mentoring for research careers: the National Research Mentoring Network. In *BMC proceedings* 11(12), 22.

### https://bmcproc.biomedcentral.com/track/pdf/10.1186/s12919-017-0083-8

Effective mentorship is critical to the success of early stage investigators, and has been linked to enhanced mentee productivity, self-efficacy, and career satisfaction. The mission of the National Research Mentoring Network (NRMN) is to provide all trainees across the biomedical, behavioral, clinical, and social sciences with evidence-based mentorship and professional development programming that emphasizes the benefits and challenges of diversity,

inclusivity, and culture within mentoring relationships, and more broadly the research workforce. This paper describes the structure and activities of NRMN.

7. American Federation of Teachers. (2010). Promoting Racial and Ethnic Diversity in the Faculty: What Higher Education Unions Can Do.

## https://www.aft.org/sites/default/files/facultydiversity0310.pdf

As generations of activists pushed back against a higher education system largely restricted to affluent white males, the campaign for racial and ethnic diversity in American colleges and universities gathered momentum in the mid-20 Century. The campaign was spurred by courtordered desegregation, the grass-roots civil rights movement, the resulting Civil Rights and Voting Rights Acts, and the Great Society educational opportunity programs. However, African-Americans, American Indians, and Hispanics continue to be underrepresented among those who complete a bachelor's degree and advanced or professional degrees that are a prerequisite to faculty positions. Underrepresented racial and ethnic faculty groups continue to encounter obstacles in their job search because of two national factors: opposition to affirmative action and the national trend away from creating and filling full-time tenure-track faculty positions. Of the only 10.4 percent of faculty positions held by underrepresented racial and ethnic groups in 2007, 73 percent are contingent positions—which means that nearly threequarters of underrepresented faculty hold positions that do not provide them with adequate wages or benefits, job security, or meaningful academic freedom. The process of effectuating a diverse faculty and staff is an essential element in achieving a greater measure of economic and social justice in America.

8. Smith, D. G., Turner, C. S., Osei-Kofi, N. & Richards, S. (2004). Interrupting the usual: Successful strategies for hiring diverse faculty. *The Journal of Higher Education*, 75(2), 133-160.

## https://www.jstor.org/stable/pdf/3838827.pdf

This study examines whether specific interventions account for the hiring of diverse faculty above and beyond hiring done in academic areas specifically focused on race and ethnicity. Using data from approximately 700 searches, the study investigates the hypothesis that at institutions with predominantly White populations, hiring of faculty from underrepresented groups (African-Americans, Latina/os, and American Indians) occurs when at least one of the following three *designated* conditions are met: (1) The job description used to recruit faculty members explicitly engages diversity at the department or subfield level: (2) An institutional "special hire" strategy, such as waiver of a search, target of opportunity hire, or spousal hire, is used; and (3) The search is conducted by an ethnically/racially diverse search committee.

9. Tsui, L. (2007). Effective strategies to increase diversity in STEM fields: A review of the research literature. *The Journal of Negro Education*, 555-581.

## https://www.jstor.org/stable/pdf/40037228.pdf

This comprehensive synthesis presents the research evidence that exists for ten intervention strategies commonly adopted by programmatic efforts striving to increase diversity in science, technology, engineering, and mathematics (STEM) fields. The disproportionately low participation of African Americans, Native Americans, and Latinos in STEM fields is attributable to a number of factors, including barriers that are of a cultural (social expectations for different groups), structural (historical laws and regulations that barred the entry of minorities into education and employment), and institutional nature (discriminatory policies and practices). While societal transformations have reduced formal and legally sanctioned barriers, the lineage of accumulated deficit opportunities within a socially stratified society continues to exert its negative impact. Empirical support is presented for three model intervention programs: The Meyerhoff Program, Minority Engineering Program (MEP), and the Mathematics Workshop. The models are effective with historically underrepresented students. The article concludes with a discussion of recommendations for future action and research.

10. Turner, C. S. (Ed.). (2015). *Mentoring as Transformative Practice: Supporting Student and Faculty Diversity: New Directions for Higher Education, Number 171*. John Wiley & Sons.

In this anthology, women and scholars of color underscore the importance of supporting one another, within and across differences, as critical to the development of a diverse professoriate. This study emphasizes and highlights: the importance of mentorship; policies, processes, and practices that result in successful mentoring relationships; real life mentoring experiences to inform students, beginning faculty, and those who would be mentors; and evidence for policy makers about what works in the development of supportive and nurturing higher education learning environments. The guiding principles underlying successful mentorships, interpersonally and programmatically, presented here can have the potential to transform higher education to better serve the needs of all its members.

11. Turner, C. S. V. (2002). *Diversifying the faculty: A guidebook for search committees*. Association of American Colleges and Universities.

## https://files.eric.ed.gov/fulltext/ED465359.pdf

The guidebook addresses only one aspect of a much larger issue that AAC&U has made a centerpiece of its programming for more than a decade. Overcoming its own legacies of

exclusion, how can higher education now tap the rich diversity within the United States as an education and civic resource? Yet despite stunning progress in diversifying the collegiate student body over the past four decades, the progress in diversifying the faculty has been discouraging. AAC&U is convinced that the majority of colleges & universities want to diversify their faculties racially and ethnically, but don't always know how. This guide serves as a remedy to that issue.

12. United States. Department of Education. Office of Planning, Evaluation, and Policy Development. (2016). Advancing diversity and inclusion in higher education: Key data highlights focusing on race and ethnicity and promising practices.

#### https://www2.ed.gov/rschstat/research/pubs/advancing-diversity-inclusion.pdf

While highlighting the Obama Administration's efforts to promote diversity in institutions of higher education (rolled back under the Donald Trump administration), this report shows the continuing educational inequities and opportunity gaps in accessing and completing a quality postsecondary education. During the past 50 years, the U.S. has seen racial and ethnic disparities in higher education enrollment and attainment, as well as gaps in earnings, employment, and other related outcomes for communities of color. Gaps in college opportunity have contributed to diminished social mobility within the United States, and gaps in college opportunity are in turn influenced by disparities in students' experiences before graduating from high school. The participation of underrepresented students of color decreases at multiple points across the higher education pipeline including at application, admission, enrollment, persistence, and completion. The interaction of race and ethnicity, family income, and parental education can influence educational and labor market outcomes. One key recommendation includes the enforcement of diversity across all levels of an institution. Research shows that campus leadership, including a diverse faculty, plays an important role in achieving inclusive institutions.

13. Whittaker, J. A., Montgomery, B. L., & Acosta, V. G. M. (2015). Retention of underrepresented minority faculty: Strategic initiatives for institutional value proposition based on perspectives from a range of academic institutions. *Journal of Undergraduate Neuroscience Education*, 13(3), A136.

## https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4521729/pdf/june-13-136.pdf

The student and faculty make-up of academic institutions does not represent national demographics. Racial and ethnic minorities are disproportionately underrepresented nationally, and particularly at predominantly white institutions (PWIs). Although significant efforts and

funding have been committed to increasing points of access or recruitment of underrepresented minority (URM) students and faculty at PWIs, these individuals have not been recruited and retained at rates that reflect their national proportions in all disciplines, but particularly in Science, Technology, Engineering, and Mathematics (STEM) disciplines. This reality represents a national crisis given a predicted shortage of workers in STEM disciplines based on current rates of training of all individuals, majority and URM, and the intersection of this limitation with persistent challenges in the recruitment, training, retention and advancement of URMs. An additional compounding factor is the increasingly disproportionate underrepresentation of minorities at higher professorial and administrative ranks. This factor thus limits the pool of potential mentors who may successfully shepherd URM students through STEM training and development. We address issues related to improving recruitment and retention of URM faculty that are applicable across a range of academic institutions. This study offers specific recommendations, including identifying environmental barriers to diversity and implementing strategies for their amelioration, promoting effective and innovative mentoring, and addressing leadership issues related to constructive change for promoting diversity.

14. Woodrow Wilson National Fellowship Foundation. (2005). *Diversity & the Ph. D.: A Review of Efforts to Broaden Race & Ethnicity in US Doctoral Education*.

## https://files.eric.ed.gov/fulltext/ED536864.pdf

This critical report focuses on educational attainment among African Americans and Hispanics because they are the largest underrepresented groups in higher education, relative to their presence in the nation's population. Similar patterns hold for the very small number of American Indians in doctoral education—just 133 out of nearly 26,000 citizen Ph.D.s in 2003, comprising 0.5% of all U.S. doctoral recipients but 0.9% of the overall population. Asians, on the other hand, received 5.2% of all Ph.D.s granted to U.S. citizens in 2003, when they represented 4.1% of the population, and are therefore not considered underrepresented.. Drawing on interviews with the leaders of 13 such programs, the report points to circumstances that increasingly impede their work. This report reveals the following findings: (1) Doctoral education's diversity record is poor. Despite some gains in recent years, by 2003 only 7 percent of all doctoral recipients were African American or Hispanic; (2) It is getting worse. Despite extraordinary support within and beyond academia for affirmative action admissions programsas evidenced by the University of Michigan case--court challenges have had a significant chilling effect, resulting in a dilution of resources and a weakening of institutional will; (3) Though a

large number of programs still bolster opportunities for minority students, there is no significant coalition that might attempt to coordinate efforts so that the overall national effort could become coherent; and (4) With a few exceptions, little data and only partial assessments are available Why be concerned with doctoral diversity? The reasons are practical, ethical, and intellectual. At the most pragmatic level, the nation must strengthen domestic doctoral education. The fact that so many more U.S. doctorates go to foreign students than to U.S. minority students raises another aspect of the issue: Educating the world's students while neglecting significant groups of the national population is a vast inequality at the highest academic level. This situation diminishes the value of American citizenship for too many of our citizens, and runs counter to the founding principles of the United States. Extensive, sharp and effective inclusionary recommendations are offered. One of the most important recommendations being: Race and economic need go together. These two efforts to even the playing field need not and should not be made oppositional and alternative, for such criteria as need or "first in family" will not provide anything akin to the same results in improving racial and ethnic diversity as programs frankly treating diversity as a goal.

15. Zellers, D. F., Howard, V. M., & Barcic, M. A. (2008). Faculty mentoring programs: Reenvisioning rather than reinventing the wheel. *Review of educational research*, 78(3), 552-588.

## http://journals.sagepub.com/doi/pdf/10.3102/0034654308320966

A comprehensive review that traces the historical evolution of mentoring programs in the United States in business and academe. It provides insights on the challenges associated with the study of mentoring, and identifies the limited research-based studies of faculty mentoring programs that currently inform our understanding of this practice in American Higher Education. The findings indicate that the sophistication of research has not advanced over the past decade. However, evidence does suggest that academe should be cautious in overgeneralizing the findings of studies conducted in corporate cultures. Although mentoring is recognized to be contextual, only recently have investigators considered the impact of organizational culture on the effectiveness of corporate mentoring programs. More rigorous investigation of this practice in higher education is warranted. As more studies point to the need to foster an employment culture that supports mentoring, understanding faculty mentoring programs within the context of their academic cultures is critical.